IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

PORTLAND DIVISION

SMITH & NEPHEW, INC. and JOHN O. HAYHURST, M.D.,

Plaintiffs,

v.

ARTHREX, INC.,

Defendant.

No. 3:08-cv-714-MO

OPINION & ORDER

MOSMAN, J.,

In this case, Smith & Nephew alleges the use of Arthrex's SutureTak and PushLock suture anchors infringes on claims 1-68 of its 5,601,557 ("'557") patent. The parties filed competing motions for summary judgment raising a variety of issues, including infringement and the reasonable royalty rate for any damages awarded. I held a hearing addressing these motions on May 23, 2016. At that time, I told the parties that I viewed this case as a continuation of the 2004 case *Smith & Nephew, Inc. v. Arthrex, Inc.*, Civ. No. 04-cv-029-MO that, like this litigation, involved allegations that Arthrex's anchors infringed on the '557 patent. In light of

this determination, I stated that I viewed the colorable differences test as the correct analysis on summary judgment.

At the end of the hearing, I took the motions under advisement. On May 24, 2016, I issued a minute order granting Smith & Nephew's infringement motion with respect to the Bio-Composite SutureTak anchors infringing and with respect to the PushLock anchors meeting the "attaching limitation," but denying its motion as to the PushLock anchors meeting the "resilience" limitation. I also granted Smith & Nephew's motion regarding reasonable royalty damages and denied Arthrex's motions for non-infringement for the PushLock and Bio-Composite SutureTak anchors. I write now to explain the reasoning of my prior ruling. As the parties are familiar with the background of this case, it is not set out here, except as is necessary in the discussion below.

I. Summary Judgment Standard

At summary judgment, the moving party bears the initial burden of pointing out the absence of a genuine issue of fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986). This burden is met by showing an absence of evidence to support the non-movant's case. *Id.* In order to defeat summary judgment, the non-moving party must then set forth "specific facts showing there is a genuine issue for trial." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986) (quotations and citation omitted). The court views the record in the light most favorable to the non-moving party. *See id.* Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no genuine issue for trial." *Id.* at 587 (quotations and citation omitted).

II. Infringement

The correct infringement analysis hinges on whether this case is properly characterized as a continuation of the 2004 case and therefore essentially a contempt proceeding or an entirely

new case involving new claims and products.[1] As I stated in the May 23, 2016, hearing, I agree with Smith & Nephew that it is accurate to call this case a continuation of the 2004 litigation. The division of this matter into two different cases was a matter of trial management, and there are no substantive differences between the products and claims at issue in the two cases.

The products challenged in this case are from the same families of anchors–SutureTak and PushLock–that were the subject of the 2004 litigation. Although this case alleges infringement of claims 1-68 of the '557 patent and the 2004 case alleged violation of claims 1-7 only, the facts viewed in the light most favorable to Arthrex do not establish that the additional 61 claims create a question of material fact regarding infringement. *See Matsushita*, 475 U.S. at 587. Claims 8-68 all depend from claims 1-7 and many of the limitations in claims 1-7 and claims 8-68 are redundant. *See Georgia Pacific Corp. v. U.S. Gypsum Co.*, 195 F.3d 1322, 1331 (Fed. Cir. 1999) ("Unless the patent otherwise provides, a claim term cannot be given a new meaning in the various claims of the same patent"). To the extent that claims 8-68 contain new limitations, the additional limitations are based on terms that were frequently used in the 2004 case and were not the subject of any dispute. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy"); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (recognizing "that district courts are not (and should not be) required to construe every limitation present in a patent's asserted claims").

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[1] I note, however, that even if I did not view this case as a continuation of the 2004 litigation, there is no absolute bar against comparing an accused product to a commercial embodiment of the claimed invention. *See Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1288 (Fed. Cir. 2010) (noting that "[o]ur case law does not contain a blanket prohibition against comparing the accused product to a commercial embodiment" where the comparison is sufficient to establish infringement").

A party seeking to enforce an injunction through a contempt proceeding must prove: (1) that the newly accused product is not more than colorably different from the product found to infringe; and (2) that the newly accused product actually infringes. *See TiVo v. EchoStar Corp.*, 646 F.3d 869, 882 (Fed. Cir. 2011). The colorably different test focuses on "the differences between the features relied upon to establish infringement and the modified features of the newly accused products." *Id.* Specifically, it focuses on whether the modifications to the elements of the product that were previously found to infringe are significant. *See id.* If the modification to the elements previously adjudged to infringe is significant, the new product is more than colorably different. *See id.* Conversely, a lack of significant modifications means the new product is not more than colorably different. *See id.* If the court finds that the product is not more than colorably different, the next step is to determine whether the newly accused product infringes on the asserted patent claims. *See id.* at 883. In this second step, the court is bound by any claim construction performed in the prior case. *See id.*

A. **Plaintiffs' Corrected Renewed Motion for Summary Judgment of Infringement**

Smith & Nephew argues that it is entitled to summary judgement of direct infringement of the '557 patent by Arthrex's Bio-Composite SutureTak suture anchors and PushLock suture anchors with large eyelets and gaps in sizes 2.4, 2.5, 2.9, 3.5, 4.5, and 5.5mm. As stated in my May 24, 2016, order, I grant Smith & Nephew's motion with respect to the Bio-Composite SutureTak anchors. I also grant the motion as to the PushLock anchors with large eyelets and gaps in all sizes meeting the "attaching" limitations, but deny the motion as to the PushLock anchors meeting the "resiliance" limitation. Smith & Nephew has met its burden of establishing that no reasonable factfinder would find more than a colorable difference between the modified element of the Bio-Composite SutureTak anchors and the elements previously adjudged to infringe or between the newly challenged PushLock anchors with large eyelets and a gap and the PushLock anchors at issue in the 2004 case with respect to the "attachment" limitation. Smith &

Nephew has also established that the Bio-Composite SutureTak anchors continue to infringe on the '557 patent. Smith & Nephew cannot, however, show that there is an absence of evidence to support Arthrex's claim that the resilience of the newly accused PushLock anchors implanted with a 14% larger drill bit is significantly different than the resilience of the PushLock products found to infringe in the 2004 litigation. *See Celotex*, 477 U.S. at 325.

1. Bio-Composite SutureTak

Smith & Nephew asserts that it is entitled to summary judgment of infringement because there is no colorable difference in the resilience of the newly accused Bio-Composite SutureTak products and the Bio-SutureTak anchors found to infringe in the 2004 case. Like the SutureTak anchors previously adjudged to infringe, the Bio-Composite SutureTak has a ribbed plastic body with a molded-in suture-loop eyelet. Arthrex modified the Bio-Composite SutureTak by adding a 15% blend of Beta tricalcium phosphate (ßTCP), a ceramic material, to the plastic body of the anchor. Arthrex argues that the addition of the ceramic material to the anchor body is a substantial change affecting the mechanical behavior of the anchor; the anchor no longer lodges by resilience in bone. As stated in the May 24, 2016, minute order [325], I find that there is no genuine issue of material fact regarding whether Arthrex's Bio-Composite SutureTak anchors infringe on the '557 patent.

a. Resiliency

Smith & Nephew relies on testing conducted in 2008 by Arthrex's supplier, Kensey Nash, to establish no issue of triable fact exists regarding whether Arthrex's addition of a ceramic material to the Bio-Composite SutureTak anchor significantly modified the anchor's resilience. Kensey Nash's testing found that the new SutureTak anchors have a modulus of elasticity that is virtually identical to the SutureTak anchors found to infringe in the 2004 litigation. Pitchford Decl. in Support Pls.' Renewed Mot. Summ. J., Ex. 9; Corrected Decl. Hayes ("Hayes Decl.") in Supp. Pls.' Renewed Mo. Summ. J., ¶¶ 17-19.

Arthex contends the 2008 test results are not relevant here. First, Arthrex points out the

2008 report indicates Kensey Nash tested a material designated as LR704, not the LR706 material used in the commercially available Bio-Composite anchors. Arthrex also offers the declaration of former Kensey Nash Vice President of Biomaterial Todd DeWitt that states "to the best of [Mr. DeWitt's] recollection," the 2008 testing "did not involve the material used in any of Arthrex's commercial products." DeWitt Decl., ¶ 4. Even viewed in a light most favorable to Arthrex, this does not create a genuine issue of fact for trial. *See Matsushita*, 475 U.S. at 587. The deposition testimony of Kensey Nash's Rule 30(b)(6) designee Joesph DeMeo establishes that the reference to LR704 in the 2008 reports was an error and that the part number of the material tested shows that the tested material was a composite of the LR706 material used in commercially available SutureTak anchors. Pitchford Decl. in Supp. Pls.' Reply in Supp. Summ. J., Ex. 8 at 3-4. Mr. DeMeo's testimony also contradicts Mr. DeWitt's "recollection." *See, e.g.*, *Schuyler v. United States*, 987 F. Supp. 835, 840 (S.D. Cal.1997) ("Just as a party who opposes a summary judgment motion may not contradict his sworn statements with his own declaration, he may not use somebody else's declaration for that purpose").

In an effort to create a genuine factual issue regarding the significant differences between the resilience of the modified Bio-Composite anchors and the SutureTaks adjudged to infringe, Arthrex offers the opinion of its expert, Dr. Moalli. He opines that Smith & Nephew's reliance on the Kensey Nash modulus of elasticity test results is inappropriate because additional factors "can" contribute to an anchor's resilience. Moalli Decl. in Supp. Def.'s Opp'n to Pls.' Mot. Summ. J., ¶ 26. For instance, Dr. Moalli notes that surface texture differences in anchors with the same modulus of elasticity "may" affect resilience and states that the characteristics of ceramic material "suggests" that the Bio-Composite material "will behave in a more brittle manner." *Id.* at ¶ 27-28. Dr. Moalli test results show when anchors are implanted into a hole prepared using the 14% larger drill, "the average diameter of the anchors decreased following implantation into bone" in a matter consistent with permanent damage. *Id.* at ¶ 31. Despite the decrease in the anchors' diameter, however, he concluded the tests revealed the modified

anchors are not resilient because they do not return or tend to return to an original or prior position sufficient to cause lodging. *Id.* at ¶ 30-31.

Even viewing this evidence in the light most favorable to Arthrex, I find that it has failed to meet its burden of showing that a triable issue of fact exists for the jury to resolve. *See Matsushita*, 475 U.S. at 587. Dr. Moalli's conclusory statements that surface texture differences and the characteristics of ceramic *could* affect resilience are insufficient to create any issue of triable fact regarding whether they actually do affect resilience. His testing results do not establish colorable difference in the resilience and lodging of the accused anchors because it is clear that Dr. Moalli's testing is based on a theory that to infringe Arthrex's anchors must squeeze through a smaller hole and then bounce back to an original position. Moalli Decl., ¶ 33 (noting that because surgeons insert anchors into sites that lack cortical bone "there will be minimal or no interaction between the anchor and cortical bone to provide the S&N alleged anchor deformation and resilience"). There is no claim limitation, however, that requires anchors to squeeze through a smaller hole in cortical bone and then expand. Instead, "lodging" means that "the anchor, once pressed into the hole, may not be removed." *Smith & Nephew, Inc.*, Civ. No. 04-cv-029-MO, 2011 Jury Inst, Inst. No. 13 (dkt. no. 934). Moreover, even assuming that the modified anchors do not "bounce back" to their original position, this does not create a triable issue of fact in light of the absence of any viable dispute that the Bio-Composite SutureTak Anchors have virtually the same modulus of elasticity as the Bio-SutureTak anchors found to infringe in the 2004 case.

In a footnote, Arthrex asserts that the 2008 testing is only relevant to the 3.0mm Bio-Composite SutureTaks because the material described in the report is a PLDLA material and, unlike the 3.0mm anchors, the 2.0 and 2.4mm anchors are manufactured with a PLLA material. I, however, agree with Smith & Nephew that Arthrex has waived any argument that testing conducted on anchors made of PLDLA is not relevant to establish the resiliency of anchors that use PLLA material by not making that argument in the 2004 litigation. In the 2004 litigation,

testing was only done on the 3.0mm Bio-SutureTak anchors that are made of PLDLA, but all Bio-SutureTak anchors were found to infringe, including the 2.0 and 2.4mm sizes. *See, e.g.*, Pitchford Decl. in Supp. Pls.' Reply in Supp. Summ. J., Ex. 16 at 9 (Arthrex documents establishing that the 2.4mm SutureTak anchor found to infringe in the 2004 litigation is made of PLLA). As Arthrex did not challenge infringement of PLLA-based anchors then, it cannot now raise this new argument.

I find that Smith & Nephew has established that there is an absence of evidence in the record to support a finding that there is any significant difference between the Bio-Composite SutureTak anchors at issue here and the Bio-SutureTak anchors found to infringe in the 2004 case. *See Celotex*, 477 U.S. at 325 (the moving party meets its burden of "pointing out" the absence of a genuine issue of material fact by showing an absence of evidence to support the non-movant's case). The Kensey Nash testing establishes that the modified features of the SutureTak anchor—the addition of a 15% blend of a ceramic material to the anchor body—do not substantially affect the mechanical behaviors of the anchor as the modulus of elasticity remains virtually the same. *See TiVo Inc.*, 646 F.3d at 882. As there are no other meaningful differences between the anchors, I find that the Bio-Composite anchors are "not more than colorably different" from the enjoined Bio-SutureTak anchors in terms of their ability to resile—perform in a resilient manner for the purpose of lodging.

b. Telescoping Drill Bits Used with the Bio-Composite SutureTak Anchors

Arthrex argues that, regardless of the test results, a factual dispute regarding whether the anchors meet the lodging and resiliency requirements (i.e. continue to infringe) when used by surgeons precludes summary judgment. Arthrex relies on the following specific facts: The record does not establish that surgeons insert the Bio-Composite SutureTak anchors into and through a sufficient layer of cortical bone; and the new drill bits used with the SutureTak products at issue in here differ from those in the 2004 case in that, because the bits are

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telescoping, they prevent the anchors from touching cortical bone. Even when viewed in the light most favorable to Arthrex, these facts do not create an issue for the jury.

First, Smith & Nephew has established that the same telescoping drill bits used with the Bio-Composite SutureTak anchors were also used with the Bio-SutureTak and PEEK SutureTak anchors found to infringe in the 2004 case. Pitchford Decl. in Supp. Pls.' Renewed Mot. Summ. J., Ex. 13 at 3. Arthrex waived any argument it had regarding lack of infringement due to use of a drill bit that prevented the accused anchor from contacting cortical bone by not raising it in the 2004 case. Even assuming Arthrex had not waived the arguement, the failure of the Bio-Composite anchor to contact cortical bone would not preclude summary judgment. There is no claim limitation that requires an anchor to squeeze through cortical bone and then expand. Instead, the relevant limitation of "lodging" as construed in the 2004 case and approved by the Federal Circuit requires that "the anchor, once pressed in the hole, may not be removed. . . . 'Lodged' means that the device is ready to secure tissue to the bone." *Smith & Nephew, Inc. v. Arthrex, Inc.*, Civ. No. 04-cv-029-MO, 2011 Jury Instructions, Instruction No. 13. Arthrex has not met its burden of setting forth "specific facts" that establish a triable issue of fact regarding whether the modification to the body of the SutureTak anchor results in the modified anchor failing to meet the "resilience" limitation. *See Matsushita*, 475 U.S. at 587. Accordingly, I find that the Bio-Composite SutureTak anchors at issue continue to infringe on claims 1-68 of the '557 patent because the anchors continue to meet the "resilience" limitation. *See TiVo Inc.* 646 F.3d at 883 (stating once the court concludes that there are no colorable differences between a modified and adjudged infringing product, the court must determine whether the modified product continues to infringe).

c. Arthrex's "Attachment" Argument

Arthrex opposes Smith & Nephew's motion for summary judgment of infringement of the Bio-Composite SutureTak anchors on the grounds that Smith & Nephew cannot show that surgeons using the anchors "attach" a suture to a member and thus cannot establish direct

infringement. This argument hinges on Arthrex's ability to raise a divided infringement defense, i.e. an argument that Smith & Nephew cannot meet its burden to establish infringement because the method steps are divided between more than one actor. At oral argument, Arthrex conceded that in the 2004 case, the Federal Circuit affirmed that Arthrex cannot raise a divided infringement defense. Arthrex argues, however, that it should be able to raise a divided infringement defense in this litigation because it has shown that the Bio-Composite SutureTak products at issue are more than colorably different as well as because Smith & Nephew has allegedly changed its position in the pending U.S. Patent Office ("PTO") re-examination to call "attachment" a method step. For the reasons discussed above, I find that Arthrex has not established a colorable difference between the Bio-Composite SutureTak products challenged here and the SutureTak anchors found to infringe in the 2004 case. Similarly, I find that Arthrex has not shown that Smith & Nephew changed its position in the PTO proceeding. Accordingly, I find that Arthrex cannot raise the divided infringement defense in this case.

Even assuming *arguendo* I allow Arthrex to raise a divided infringement argument with regard to "attaching" the suture to a member, the defense would fail. In the 2004 case, I construed the meaning of various groups of words, including "attaching a suture to a member." During the 2007 trial, I instructed the jury:

> "*Attaching a suture to a member" means that the suture is attached to the anchor itself. The molded-in eyelet of the Bio-SutureTak is part of "the anchor itself," and, as a result, this device does attach the suture to the anchor.* The eyelet of the PushLock, through a separate piece, is part–excuse me, though a separate piece, is part of the anchor, and as a result, this device does attach the suture to the anchor. Pitchford Decl. in Supp. Pls.'s Renewed Mot. Summ. J., Ex. 22 (emphasis added).

The plain language of the jury instruction clearly indicates that in the 2004 case, I construed "attaching a suture to a member" as a structural limitation and not as an active method step to be performed by a surgeon. The Federal Circuit has recognized that it is acceptable to use structural limitations in method claims. *See, e.g.*, *Microprocessor Enchancement Corp. v.*

Texas Instruments, Inc., 520 F.3d 1367, 1374-75 (Fed. Cir. 2008) (noting that "method claim preambles often recite the physical structures of a system in which the claimed method is practiced").

Relying on my May 2007 Opinion re Infringement in the 2004 case, Arthrex disputes that I have consistently construed "attaching" as a structural limitation. Specifically, Arthrex notes that I stated in reference to the V-Tak anchor that the "patent claims are written as a series of steps" and "from the order and language of these steps, I find this claim anticipates that the suture is attached to the anchor before it is inserted into the bone hole." *Smith & Nephew, Inc.*, 04-cv-029, Opinion re Infringement (dkt. no. 241), p. 11. Although this finding requires that the suture be attached to the anchor before it is inserted into the hole, it does not preclude this limitation from being structural. Indeed, this finding—that the suture must be attached prior to the anchor before insertion into the hole—is consistent with construing "attachment" as a structural limitation instead of a method step.

I find the Bio-Composite SutureTak anchors of all sizes are not more than colorably different from the enjoined Bio-SutureTak anchors and that the Bio-Composite SutureTak anchors continue to infringe on claims 1-68 of the '557 patent. Accordingly, I grant Smith & Nephew's motion for summary judgment of infringement on the Bio-Composite SutureTak anchors.

2. PushLock Anchors with Large Eyelets and Gaps; All Sizes

Smith & Nephew asserts the lack of colorable differences between the PushLock anchors with large eyelets and gaps and the PushLock anchors with smaller eyelets and no gap previously found to infringe entitles it to summary judgment of infringement of the newly accused PushLock products. Arthrex's PushLock anchors are two-piece anchors consisting of an eyelet and a body component. Arthrex modified the PushLock anchors at issue in this case in the following ways: (1) a gap remains between the anchoring body and the eyelet after the anchor is inserted by a surgeon; and (2) eyelets are larger in diameter so they no longer fit within the

anchoring body after the anchoring body is lodged in the bone. Additionally, the 4.5 and 5.5mm PushLock anchors have scalloped or faceted ribs, and Arthex began using a 14% larger drill bit to implant the 3.5mm PushLock anchors. Arthrex asserts that the modifications to the PushLock products are significant and that the newly accused anchors do not meet the "attachment" or "resilience" limitations. As stated in the May 24, 2016, minute order, I find that Smith & Nephew is entitled to summary judgment with respect to whether the modified PushLock anchors meet the "attachment" limitation but that there exists a genuine issue of fact for the jury as to whether the newly accused products meet the "resilience" limitation.

a. "Attachment" Limitation

Smith & Nephew asserts that, because there is no colorable difference between the function of the eyelet and plastic anchor body in PushLock anchors with a gap and the anchors without a gap adjudged to infringe, it is entitled to summary judgment regarding the "attaching" limitation. Arthrex asserts summary judgment is not appropriate because the large eyelet cannot fit into the anchoring body and this means that surgeons are not attaching a suture to member that is lodged in bone. Arthrex also argues the attaching limitation cannot be met because the gap modification ensures the eyelet and anchoring body never touch.

I agree with Smith & Nephew that the relevant question is whether the modification results in more than a colorable difference in the ability of the eyelet and body component of the modified PushLock anchors to function together as a suture anchor. In the 2004 case, I made clear that "member" included multiple pieces functioning together as a single anchor. *Smith & Nephew, Inc.*, Civ. No. 04-cv-029-MO, Opinion re Infringement (dkt. no. 241), pp. 9-10. I found the molded-in eyelet, "though a separate piece is part of the anchor [because] without the eyelet, the body of the device could not function as an anchor." *Id.* In other words, the functional relationship between the eyelet and plastic body determined whether they formed a single anchor, not the physical interaction.

Smith & Nephew has met its burden of "pointing out" an absence of a genuine issue of

fact for the jury regarding any colorable difference in the functional relationship between the eyelet and the plastic body in the modified PushLock anchors. *See Celotex*, 477 U.S. at 325. Arthrex's Director of Engineering, Peter Dreyfuss, testified that the purpose of the modified PushLock anchor's components did not change with either the large eyelet or the gap changes and that the proper technique for surgeons to use did not differ after the changes. Pitchford Decl. in Supp. Pls.'s Reply in Supp. Renewed Mot. Summ. J., Ex. 24, pp. 2, 3 (stating that the purpose of the eyelet component is "to have the sutures used in the repair, threaded through it" and that "the barbed component of the PushLock anchor provides the fixation of the sutures in the repair between the barbed component and the bone"). Mr. Dreyfuss testified the purpose of the eyelet component and the plastic (i.e. barbed) component of the PushLock anchor did not change with the large eyelet and gap modifications. *Id.* Smith & Nephew also cite to Arthrex's failure to notify its surgeon customers, alter its directions for use of its modified PushLock anchors, or generate any regulatory memos regarding the modifications to the PushLock products, all of which are required when modifications are made to an existing product. *Id.* at Ex. 25, pp. 506, Ex. 25, pp. 2-4, Ex. 26, pp. 2-3.

Even viewing the record in the light most favorable to Arthrex, I find that it has failed to establish a rational juror could find the gap in the newly challenged PushLock products is relevant to the "attaching limitation." *See Matsushita*, 475 U.S. at 587. Arthex's expert, Dr. Moalli's assertion that the gap between the eyelet and the anchor body precludes "attachment" is based on his misunderstanding that the "attachment" limitation was met in the 2004 case because the "eyelet joins together with the anchor body during insertion of the anchor." Moalli Decl. in Supp. Def.'s Opp'n Pls.' Renewed Mot. Summ. J., ¶ 48. His conclusory statement that "if the eyelet is not wedged within the anchor body, it cannot assist with anchoring the suture to the bone" is contradicted by the testimony of Arthrex's Director of Engineering that the purpose of the anchor components did not change with either the large eyelet or gap modifications. *Compare*, Moalli Decl. in Supp. Def.'s Opp'n Pls.' Renewed Mot. Summ. J., ¶ 49 with Pitchford

Decl. in Supp. Pls.'s Reply in Supp. Renewed Mot. Summ. J., Ex. 24, pp. 2, 3. Thus, I find that there are no more than colorable differences between the function of the plastic anchor body and the eyelet in the newly challenged PushLock anchors and the anchors previously adjudged to infringe.

b. Resiliency

In the 2004 case, Smith & Nephew's expert, Dr. Hayes, conducted resiliency tests using large eyelet 3.5mm PushLock anchors, the only ones that were available. Based at least in part on the pull-out tests he conducted, the jury found the 3.5mm PushLock anchors infringed because they met the resilience limitations. Smith & Nephew argues these tests mandate a finding that the modified 3.5mm Bio and PEEK PushLock anchors meet the resilience limitation. Arthrex argues the PushLock resiliency test results presented at the 2011 trial are not applicable in this case because Arthrex changed the dimensions of the drill bit used to form the hole for the 3.5mm PushLock anchors to be 14% larger and because it changed the rib shape of the 4.5 and 5.5mm anchors. I agree that Smith & Nephew cannot rely on the results of resiliency tests conducted in the 2004 case using a smaller drill and anchors with different shaped ribs to establish that no triable issue of fact exists regarding the resiliency of the modified PushLock anchors. *Celotex*, 477 U.S. at 325.

Smith & Nephew asserts that pull-out testing conducted by Dr. Hayes on the modified 3.5mm PushLock anchors, in all materials (PEEK, bioabsorbable, and biocomposite) as well as the 4.5 and 5.5mm anchors with modified ribs establishes that these anchors meet the resilience and lodging limitations. Hayes Decl. in Supp. Pls.' Renewed Mot. Summ. J., ¶¶ 82-86, 89-93. Arthrex challenges the results of Smith & Nephew's tests on the basis that pull-out tests are not "clinically relevant" and that Dr. Hayes failed to account for, among other things, misalignment between the nose of the anchoring body and the separate eyelet. Moalli Decl. in Supp. Def.'s Opp'n Pls.' Renewed Mot. Summ. J., ¶¶ 65-70. Arthrex also offers evidence that pull-out tests conducted by its expert, Dr. Moalli, indicate that the modified 3.5mm PushLock anchors

implanted with the larger drill bit do not exhibit any resilient properties. *Id.* at ¶¶ 71-72. Smith & Nephew contends that Dr. Hayes was aware of and corrected for misalignment. Hayes Decl. in Supp. Pls.' Reply in Supp. Renewed Mot. Summ. J., ¶ 35. Arthrex challenges Dr. Hayes's explanation of how he accounted for misalignment on the basis that Dr. Hayes does not adequately explain his methodology, but merely asserts that he did. Moalli Decl. in Supp. Def.'s Sur-Reply Opp'n Pls.' Renewed Mot. Summ. J., ¶ 20.

I find that Smith & Nephew has failed to meet its burden at summary judgment to establish the absence of a genuine issue of material fact regarding whether the modified PushLock anchors meet the "resilience" limitation. *Celotex*, 477 U.S. at 325. While I do not credit Arthrex's assertion that push-out tests are scientifically invalid, I find that whether Dr. Hayes's push-out tests on the modified PushLock anchors adequately accounted for the potential of misalignment is a genuine issue of fact. Both parties' experts agree it is possible during a push-out test for the eyelet to tip over, wedge at an angle against the bone hole, and skew the push-out force results. According to Smith & Nephew, Dr. Hayes accounted for possible misalignment by using a test machine that moves along only one axis and modifying the push-out rod to ensure the anchor did not tip. Pls.' Reply Br. in Supp. Renewed Mot. Summ. J., 29; Decl. Hayes in Supp. Pls.' Reply Br. in Supp. Renewed Mot. Summ. J., ¶ 35. Arthrex contends that Dr. Hayes's methodology is flawed because the movement of the test sample, not the machine, creates misalignment concerns. Def.'s Sur-Reply to Pls.' Mot. Summ. J., 8; Moalli Decl. in Supp. Def.'s Sur-Reply to Pls.' Mot. Summ. J., ¶ 20. Arthrex also contends the modified push-out rod Dr. Hayes stated he created would not work with the anchors he was testing because of its size. Moalli Decl. in Supp. Def.'s Sur-Reply to Pls.' Mot. Summ. J., ¶ 19.

Smith & Nephew's conclusory statement that Dr Hayes accounted for possible misalignment in his push-out tests is not sufficient to establish an absence of a genuine issue of material fact regarding his methodology. A reasonable fact-finder could credit Arthrex's criticisms of Dr. Hayes's efforts to account for misalignment and conclude that his testing does

not establish the resilience of the modified PushLock anchors. Similarly, Smith & Nephew's contention that no rational fact-finder could accept Dr. Moalli's competing tests regarding the resilience of the modified 3.5mm PushLock anchors does not satisfy its burden on summary judgment. Smith & Nephew is not entitled to summary judgment regarding the resiliency of the modified PushLock anchors at issue in this case.

B. Arthrex's Motion for Summary Judgement of Non-Infringement for Bio-Composite SutureTak Products

Arthrex asserts it is entitled to partial summary judgment of non-infringement with respect to sales of its Bio-Composite SutureTak anchors because Smith & Nephew cannot meet its burden of establishing direct infringement. Specifically, Arthrex asserts any infringement is divided between Arthrex and its customer surgeons because it sells Bio-Composite SutureTak anchors with the suture pre-attached. Consistent with my resolution of Smith & Nephew's motion on the same anchors, I find Arthrex cannot raise a divided infringement defense in this case, and even if it could, the defense would fail because "attachment" is a structural limitation, not a method step. Accordingly, Arthrex's motion for partial summary judgment of infringement of the Bio-Composite SutureTak anchors is denied.

C. Arthrex's Motion for Summary Judgment of Non-Infringement for PushLock Products

Arthrex seeks summary judgment of non-infringement with respect to its modified PushLock products. As with my resolution of Smith & Nephew's motion on infringement of the PushLock anchors, I find there are issues of disputed fact for a factfinder to resolve with respect to the resiliency of the newly challenged PushLock products. Thus, Arthrex's motion for summary judgment of non-infringement for PushLock products is denied.

III. Reasonable Royalty Damages

Smith & Nephew asserts it is entitled to summary judgment and the appropriate rate for reasonable royalty damages is 11%, the same rate that was awarded by the jury and by the Court for supplemental damages. Smith & Nephew argues Arthrex's infringement has been continuous

and uninterrupted since 2001, the initial date of infringement of the 3mm Bio-SutureTak anchor. It also contends there can be no genuine dispute that the issues in the 2004 litigation and this litigation are the same because the differences between the accused anchors are insubstantial. Thus, Smith & Nephew asserts the same royalty rate applied in the 2004 case should apply to royalty damages awarded in this litigation.

Arthrex first argues a 2006 Federal Circuit decision, *Applied Medical Res. Corp. v. U.S. Surgical Corp.*, 435 F.3d 1356 (Fed. Cir. 2006), bars the application of the royalty rate from the 2004 case to this litigation. Arthrex next disputes the jury even decided on a reasonable royalty rate in the 2004 case because it awarded a lump sum royalty, not a rate. Arthrex also asserts there are a multitude of disputed facts relevant to the royalty rate analysis—differences in the products, damage analysis, and hypothetical negotiation dates—that preclude summary judgment.

I do not read *Applied Medical* as barring the application of the royalty rate from the 2004 case. As Smith & Nephew points out, in that case, the Federal Circuit concluded that, although the sales of the infringing products "may appear to be continuous in time," they were not necessarily "continuous in law." *Id*., 435 F.3d at 1362. The sales of the second infringing product were a "separate and distinct infringement" from the sales of the first product. *Id* at 1361. The first infringing product was off the market and enjoined before the second infringing product was introduced. *Id.* at 1358. The record establishes that the sales of the products at issue here and in the 2004 case overlapped; indeed, the products at issue in this case were on the market during the 2004 litigation and Smith & Nephew tried to include them in the 2011 trial in the 2004 litigation. Another significant distinction is that in this litigation there is an allegation that the products at issue violated the injunction entered in the 2004 case and in *Applied Medical* there was no allegation the defendant violated the injunction with the introduction of the second infringing product. *Id.* at 1362. Accordingly, I do not read *Applied Medical* as requiring that I deny Smith & Nephew's motion. *Id*. (noting "[w]e recognize that there may be instances,

which we do not address here, in which two products, even if not identical, may present the same damages analysis").

Even viewed in a light most favorable to Arthrex, its arguments do not raise a genuine factual dispute that precludes summary judgment that the royalty rate applied in the 2004 case is appropriate to apply to royalty damages awarded here. While Arthrex is correct that the jury awarded a lump sum for royalty damages, I am permitted to determine the damages methodology adopted by the jury in awarding royalty damages. *SynQor, Inc. v. Artesyn Technologies, Inc.*, 709 F.3d 1365, 1384-85 (Fed. Cir. 2013) (approving the district court's use of the methodology that was adopted by jury for awarding supplemental damages). Moreover, Arthrex agreed in the 2004 case that the 11% rate "approximates the jury verdict." Pls.' Reply Br. in Supp. Mot. Summ. J. Reasonable Royalty Damages, p. 4-5 (citing Def.'s Resp. in Opp'n Mot. for Supplemental Damages and Additional Pre-Judgement Interest, p. 9, n. 4). As discussed above, Arthrex has not shown any genuine issue of fact regarding whether there are substantial differences between the products included in the 2004 case and the anchors at issue here. Finally, I do not find the parties' submission of new expert reports creates a genuine issue of triable fact regarding whether the royalty rate awarded in the 2004 case is appropriate here. I grant Smith & Nephew's motion to apply the 11% rate that approximates the jury's royalty rate award in the 2004 case to any royalty damages awarded in this litigation.

IV. Conclusion

For the foregoing reasons, Smith & Nephew's motion for summary judgment of infringement [224] is GRANTED in part and DENIED in part. Arthrex's motions for summary judgment as of non-infringement [197] [199] are DENIED. Finally, Smith & Nephew's motion for summary judgment as to reasonable royalty damages [267] is GRANTED.

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Within three weeks of the date this order is filed, the parties are directed to submit jointly agreed upon dates for a trial in the fall of 2016 on the issue of the resilience of the modified PushLock anchors.

IT IS SO ORDERED.

DATED this 15 day of June, 2016.

/s/Michael W. Mosman
MICHAEL W. MOSMAN
Chief United States District Court